AI Accelerator& GPU

MXM Module MX500B-QA



Features

- NVIDIA® RTX PRO™ 500 Blackwell Embedded GPU
- 1792 CUDA cores, 14 RT cores and 56 Tensor cores, 6GB GDDR7 memory
- PCIe Gen 4 x8 interface via golden finger
- 9.19 TFLOPS peak FP32 performance
- Up to 294 TOPS AI performance

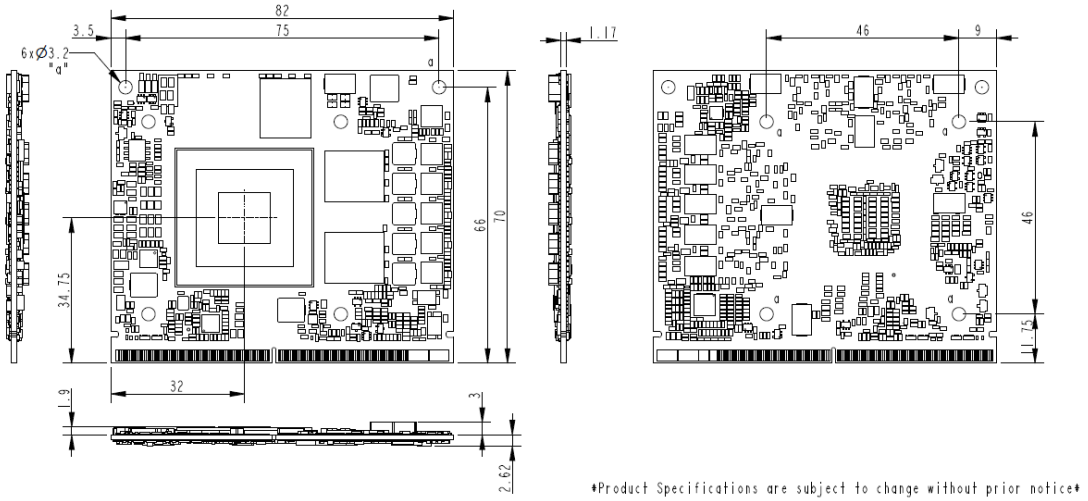
Specifications

Model Number	MX500B-QA	
GPU Engine Specs	NVIDIA RTX PRO 500 Blackwell Embedded GPU Architecture: NVIDIA Blackwell CUDA Cores: 1792 Tensor Cores: 56 RT Cores: 14 Floating Point Performance: 6.42 TFLOPS Core Clock (MHz): Base= 1357 / Boost= 1792	NVIDIA RTX PRO 500 Blackwell Embedded GPU Architecture: NVIDIA Blackwell CUDA Cores: 1792 Tensor Cores: 56 RT Cores: 14 Floating Point Performance: 9.19 TFLOPS Core Clock (MHz): Base= 2160 / Boost= 2565
Memory Specs	Size: 6GB GDDR7 Speed: 24 Gbps Interface Width: 96-bit Bandwidth (GB/sec): 288	
Feature Support	PCI Express 4.0 x8 DirectX: 12 Ultimate Open GL 4.6 Vulkan 1.4	
Display	Resolution: 7680x4320 (2) Maximum resolution 8K@240Hz (7680x4320) Max: 3x DisplayPort 2.1a (DSC1.2a)	
Power Consumption	Total Graphics Power (TGP): 35 W	Total Graphics Power (TGP): Up to 60 W (1)
Form Factor	MXM Graphics Module Version 3.1, Type A	
Dimensions (WxD)	82.0 x 70.0 mm (3.22” x2.75”)	
Net Weight	0.037 kg (0.082 lb)	
Temperature	Standard: Operating Temp.: 0 to + 55°C (32°F ~131°F)/ Extended Operating Temp.: -40 to + 85°C (-40°F ~185°F)/ Storage Temperature: -40 to + 85°C (- 40°F ~ 185°F)	
Humidity	40°C @ 95%, Non-condensing	
OS Support	Windows 10-64bit / Windows 11 / Linux 64-bit	
Certification	CE/FCC/UKCA	

1. TGP(W) marked as "Up to XXW" indicates the maximum TGP, subject to system power design and operating conditions.
2. DP2.1a (DSC 1.2a): 4-Lane UHBR20/13.5/10, up to 76.98 Gbps per connector. Supports up to 8K@240Hz with DSC, depending on display configuration and display sink support.
   HDMI 2.1b: In TMDS mode, supports up to 4096x2160 @ 60Hz. In FRL mode, supports up to 8K (7680x4320) @ 60Hz using YUV420 or DSC. 8K@60Hz requires two display tiles, and the display sink must support DSC or 4:2:0 pixel format through a single output port.
   HDCP 1.4 / 2.2 / 2.3 supported. (eDP, LVDS, VGA, and USB-C display outputs are not supported.)
   HDMI display connectivity depends on the carrier-board implementation. For direct Dual-Mode DisplayPort (DP++) output, a supported external DP AUX device is required on the carrier board.

*Product Specifications Are Subject To Change Without Prior Notice

System & Mounting Dimensions



Ordering Information

Model name	Description
MX500B-QAA-A1	MXM-A, NVIDIA RTX PRO 500 Blackwell, Gen4.0 x8, 6GB GDDR7, 3xDP, 60W@19V, 0°C to +55°C
MX500B-QAA-A2	MXM-A, NVIDIA RTX PRO 500 Blackwell, Gen4.0 x8, 6GB GDDR7, 3xDP, 35W, 0°C to +55°C
MX500B-QAW-A1	MXM-A, NVIDIA RTX PRO 500 Blackwell, Gen4.0 x8, 6GB GDDR7, 3xDP, 60W@19V, -40°C to +85°C
MX500B-QAW-A2	MXM-A, NVIDIA RTX PRO 500 Blackwell, Gen4.0 x8, 6GB GDDR7, 3xDP, 35W, -40°C to +85°C
MX500B-QAX-A1	MXM-A, NVIDIA RTX PRO 500 Blackwell, Gen4.0 x8, 6GB GDDR7, 3xDP, 60W@19V, Coating, -40°C to +85°C

Accessory (Optional)

Part No.	Description
92-6MXM4H-1002	PCIE Carrier Board, MXM3.1, Gen4.0 x16, 4x HDMI, 0°C to +55°C
3906000004S000	MXM-A Cooler, For Blackwell, TWO BALL, 12V 4PIN
3901000005N000	MXM Type A Heat Spreader (for 500B/2000B Blackwell)

Copyright © 2026 Aetina Corporation. All rights reserved.